

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



# THE FARM INDEX

U.S. Department of Agriculture/July 1971



U.S. DEPT. OF AGRICULTURE  
NATIONAL AGRICULTURAL LIBRARY  
RECEIVED

AUG 10 1971

PROCUREMENT SECTION  
CURRENT SERIAL RECORDS



## Will this be the year cotton producers have been waiting for?

Production for the '71 crop could move higher. Domestic mill use is running ahead of 1970's, as are cotton exports. Carryover this August will be the smallest in nearly 20 years. All of which have combined to buoy cotton prices.

"However," says ERS in its latest issue of *The Cotton Situation*, "the recent rise in cotton prices—if continued—would limit expansion in cotton use.

"Other negative factors include larger manmade textile fiber imports, smaller cotton textile exports, and sharply reduced military use of cotton."

As this was written, cotton plantings in Texas—our No. 1 cotton State—were behind schedule due to severe drought. If production in Texas proves a disappointment, this would limit an expected gain in total U.S. output in '71. Meanwhile, cotton prices are the highest in recent years.

Sharpest price rise has been for the shorter staples. The average spot market price for Middling 15/16 inch increased to 23.65 cents per pound in May, compared with 20.76 in the same month a year ago and 19.46 in May of '69.

Daily rate of domestic mill use has been above year-earlier levels since December. Mills have not been able to fill all orders in recent months. Cotton demand in the next few months may trend higher.

Consumption of manmade staple fibers since August 1970 has dropped back, whereas overall cotton use has gained ground.

U.S. cotton exports are running a third above those of last season. Shipments this year are projected at 3.5 million bales at the minimum, up  $\frac{3}{4}$  million from 1969/70. Foreign free world cotton production in '70 fell  $2\frac{1}{2}$  million bales to 23.6 million. Con-

sumption, judging by most indicators, will peak this season.

Stocks of the Commodity Credit Corporation are about one-fourth of what they were this time in mid-1970. Loan activity for new crop cotton has slackened in response to tight supplies and higher prices. Sales of old-crop cotton have been large.

**Supplies of red meat** will stay abundant during the second half of '71, with beef to pick up where pork leaves off. So far this year, nearly all the gain in red meat output came from pork. Production of beef and lamb and mutton were about the same as in January-June 1970.

Summer pork output will probably continue above the levels of a year earlier. But low hog prices since late 1970 are causing production cutbacks. So, the slaughter in October-December will probably be moderately smaller than in the fall of '70.

Beef production is seen building in the second half, as indicated by larger placements of cattle on feed this past winter and spring. Probabilities are the cow slaughter will also be up.

These increases will more than offset prospective reductions for veal and lamb and mutton. The drop in veal production reflects the dwindling number of dairy animals plus further expansion of the cattle feeding industry. For lamb and mutton, the anticipated decline in output is attributed to a smaller lamb crop.

**Broiler meat output** will lag through the summer but may move above the '70 levels in the fall. Chick placements for market supplies in June and July are down about 5 percent. Smaller supplies of broiler meat are expected to hold summer broiler prices well above year-earlier quotations.

**Egg output**—to decline seasonally in the coming months—will outpace the 1970 performance throughout most of this year. Production of pullets for laying flock replacements in the summer and fall dropped sharply. However, increased livability resulting from the recently approved vaccine against Marek's disease may offset the decline in replacement numbers (see page 6).

**Vegetable processors** plan bigger packs for the coming season. There'll probably be a larger pack of frozen vegetables than last year, and slightly

more canned. But this will only keep supplies about on an even keel, since strong demand is expected to continue and the old-pack carryover is much smaller this season.

**Domestic feed grain use** won't be a record breaker, but it will come close. Usage is placed at 154 million tons for the marketing year (ends September 30 for corn and grain sorghum and June 30 for oats and barley). If realized this would be 2-3 million tons short of the alltime high reached in 1969/70. Rising feed grain costs—and consequent adjustments in livestock numbers—are keeping the lid on utilization this year.

Farmers' feed grain prices have been averaging about a fifth higher than in the 1969/70 season. Prices will continue to be buttressed by strong domestic demand and shrinking supplies, until the '71 crops are made.

**U.S. tobacco use** is expected to decline in 1970/71 for the sixth consecutive year, despite record output of cigarettes.

Total use is put at roughly 1.9 billion pounds—about equal to the 1970 crop. Carryover remains unchanged at 3.7 billion pounds moving into 1971/72 (marketing year begins July 1 for flue-cured and cigar wrapper; October 1 for other types). Stocks are the smallest since the early 1950's.

Through the third quarter of fiscal '71, cigarette use was 2 percent above last year's 530 billion. Cigar use was trailing year-earlier levels, and is expected to be down about 1 percent from the 8.1 billion smoked in 1969/70.

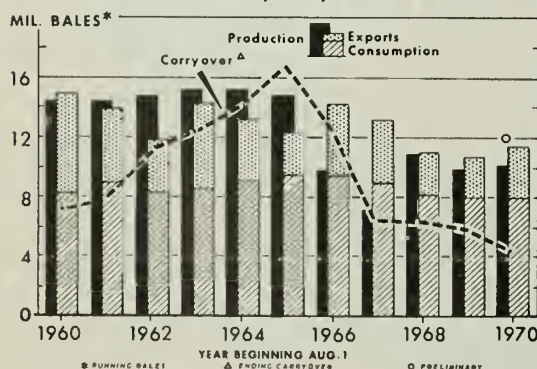
Cigarette output in the year ending June 30 is estimated 5 percent higher than the 562 billion pieces produced in 1969/70.

U.S. exports of unmanufactured tobacco are projected slightly lower for the marketing year. But calendar year exports will probably exceed 1970's 510 million pounds.

**Foreign spotlight. U.S. agricultural trade in the black.** In 1970 our sales of farm products abroad topped our purchases by \$1.5 billion—\$7.2 billion against \$5.7 billion. This favorable agricultural trade balance was up 54 percent from 1969 and represented just over half of the total U.S. trade balance of \$2.7 billion.

**Brazil.** "Best since 1965" is this year's Brazilian coffee harvest, estimated at

**COTTON PRODUCTION, USE, AND CARRYOVER**



# Contents

23.6 million bags and generally excellent. Last year's crop, affected by a '69 freeze, was a mere 9.75 million bags. To make its '71 coffee as competitive as possible, Brazil's Coffee Institute has slashed the minimum export price from U.S. 51¢ a pound to 39¢. At the same time, a major export tax (contribution quota to the Institute) was cut 46 percent so that growers and exporters would not suffer from the lowered export price.

*EEC.* Out of nearly 4½ million farms in the European Economic Community, close to 2 million (mostly one man operations) are expected to fold by 1980 as their over-55 owners retire and the land becomes part of other farms or is used for recreational purposes. Of present farms, only 400,000 are considered capable of meeting future competitive conditions, but this number of viable farms could easily reach 1.2 million in a short time.

*Portugal.* While Portugal's grain output stagnated between 1960 and 1970, demand more than doubled—hitting 2.2 million tons last year. Wheat and corn imports jumped from 200,000 to 800,000 tons and are likely to reach 1 million in 1971 and 1972. Traditional imports of U.S. wheat have rebounded since Spain's competing surplus of recent years has dwindled. The Portuguese took 239,000 tons of our wheat last year, versus 98,000 in '69. Their U.S. corn purchases run about 100,000 tons yearly.

*Thailand.* The world's second largest rice exporter (after the U.S.) recently eliminated its "premium" export tax on all grades of rice with over 5-percent-broken content, and on all parboiled rice. This amounts to a \$25-per-ton cut in the export taxes on at least 60 percent of Thai commercial exports that have been selling at an average of about \$75 per ton. With a lower price, Thai rice can offer the U.S. stiffer competition, particularly in the Far East.

## FARM

## RURAL

## MARKETING

## CONSUMER

## FOREIGN

Martin Schubkegel  
Editor

Diane Decker  
Diana Morse  
Walter M. Patrick  
Staff Editors

Audrey Ames Cook  
Contributing Editor

Contents of this magazine may be reprinted without permission. They are based on research of the Economic Research Service and on studies done in cooperation with State agricultural experiment stations. Use of funds for printing this publication approved by Director of the Bureau of Budget, May 24, 1967. Subscription price: \$2 yearly (\$2.50 foreign). Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

## Features

- 4 **The Vegetable Trek**  
Why U.S. vegetable production went westward
- 9 **Rural Blacks In The City**  
Special progress report on blacks who left rural America
- 12 **Beef Margins: How They're Set**  
Tracing a whole steer from farm to supermarket
- 15 **Ice Milk**  
Its new status among frozen desserts
- 17 **Thailand**  
A one-crop economy sprouts out

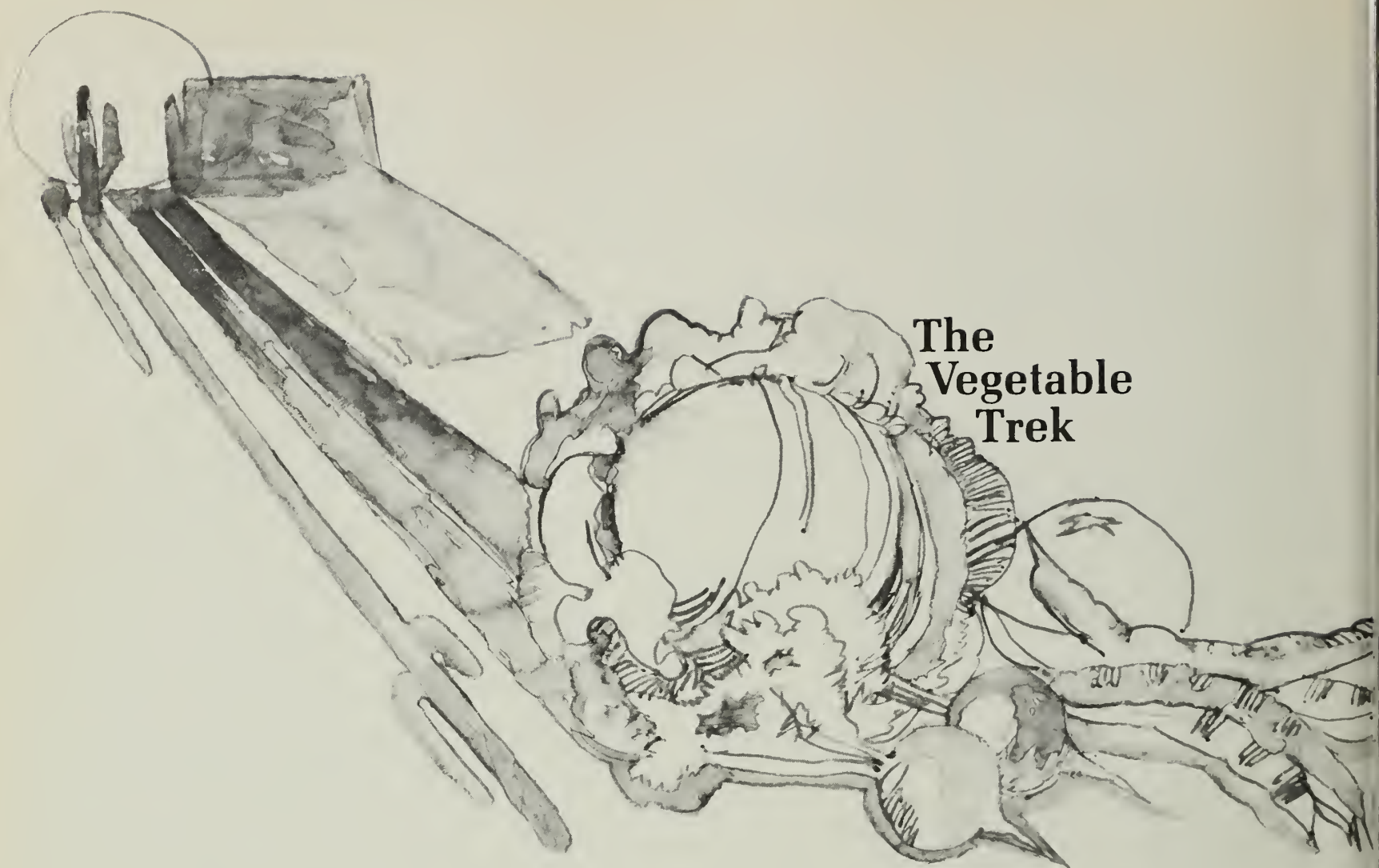
## Departments

- 2 **Outlook**
- 21 **Addresses of State Experiment Stations**
- 22 **Recent Publications**
- 22 **Article Sources**
- 23 **Economic Trends**

Numbers in parentheses at end of stories refer to sources listed at end of issue.

The Farm Index is published monthly by the Economic Research Service, U.S. Department of Agriculture. July 1971, Vol. X, No. 7





## The Vegetable Trek

*Vegetable production in the U.S. has moved westward over the years. Today, more than half the Nation's vegetables are grown in the West, with California leading.*

Vegetables didn't exactly pack their bags, like pioneers, and push westward to seek their fortune. But in their own way, many have journeyed across the country to the West where they've flourished.

Today, more than half the Nation's vegetables are grown in the West.

California, by far the leading vegetable State, produces close to 40 percent of both fresh vegetables and vegetables for processing.

Mechanical harvesters, new seed varieties, and climatic advantages all played a role in the shift that brought the West to dominance in the 1960's.

This move came largely at the expense of the Northeast. Both New York and New Jersey have declined

in relative importance in vegetable production. But their tonnage shot up for processed vegetables even though they dropped in the national percentage ratings. New York supplied the Nation with 5.5 percent of all vegetables for processing in 1957-59, but only 4.2 percent in 1967-69. New Jersey dropped from 3.7 percent to 3.4 percent.

Their tonnage for the fresh vegetable market decreased substantially. Still, New York is one of the top five States (the others are California, Florida, Texas, and Arizona) that produce 70-75 percent of all fresh vegetables.

As for producers of vegetables for processing, five States make up 65 percent of that tonnage—California, Wisconsin, Minnesota, Oregon, and Ohio.

All this does not necessarily mean that the East will some day cease to be important as a vegetable producer. One reason why it will continue in the vegetable picture is that

some of the larger national processors often find it advantageous to contract with growers in several regions, to be assured of a steady supply of raw products. Another reason is simply that the major consuming centers are in the East. Eastern production has a competitive advantage in freight costs.

From the buyer's end, there's often preference for vegetables from a certain locality. Some canners and buyers for instance, claim there is no tomato as tangy as one grown in the East.

Characteristics of certain fresh market crops themselves are also influential. Some can't be shipped long distances without suffering loss in quality. Sweet corn, for instance, loses its sugar content quickly and therefore considerable quantities are grown near where it is used. The exception is the Nation's largest single producer, Florida, where growers have made special efforts in refrigerated handling and transport to over-



come a thousand-mile trip to market.

New machinery, specially designed for Eastern soils and growing conditions, is also expected to keep up some production in the East. A new harvester for processing tomatoes, for example, has completed successful field tests.

But the overall trend in vegetable production is definitely toward fewer and more specialized locations.

Checking some of the leading vegetables, five out of six heads of lettuce on the market come from two States—California or Arizona;  $\frac{7}{8}$  of the Nation's tomatoes come from five States;  $\frac{4}{5}$  of the sweet corn for processing from five States; and  $\frac{2}{3}$  of the onions from four States.

In addition to this specialization by locality, the vegetable industry is also changing with the growing consumer demand for more processed foods.

Until 1964, per capita consumption of fresh vegetables exceeded that of processed vegetables. That year they became equals—100 pounds each on a fresh weight basis—and since then, processed vegetables have moved to the fore. In 1969, 54 percent of total consumption was in canned or frozen form.

Total production of the 10 leading vegetables for processing rose from

7.1 million tons in 1957–59 to 10.5 million in 1967–69.

Fresh vegetable production, on the other hand, grew only moderately during the same period—from 10 to 11 million tons. This covers 27 fresh vegetable and melon items. Per capita use, excluding melons, dropped from 106 pounds in 1960 to 98 in 1967–69.

The trend is definitely toward a more highly mechanized vegetable industry, and this increase in demand for processed vegetables fits in well with that trend. Vegetables for processing have proved more adaptable to mechanization, particularly in harvesting, than fresh items.

The expense and scarcity of domestic hand labor is one reason American fresh vegetable imports have increased—from  $2\frac{1}{4}$  percent of the total fresh supply in 1957–59 to 4 percent in 1967–69.

Mexico is by far the greatest source of our imports of fresh vegetables. In 1969, it furnished 20 percent of the annual supply of fresh cucumbers and eggplant used in this country, and 18 percent of the fresh tomatoes.

In coming years, crops that depend on extensive hand labor are expected to be imported in increasing quantities (1).

## Fewer Farms To Mark 1980 Landscape

The trend toward fewer and bigger farms will probably gather steam this decade.

Major thrusts include (1) further technological advances in farming and related industries, (2) greater availability of capital and nonfarm resource inputs at a relatively lower cost than that for labor and land, and (3) economies of scale, particularly in marketing farm products and purchasing inputs.

Based on recent trends in farm numbers and related developments, ERS economists have ventured some projections for 1980:

*Slightly fewer than 2 million farms.* The number is estimated at 1.9 million—about half the 1960 total. Farm units in the North and East are expected to be down by a third from the mid-1960's; in the South, down two-fifths.

*Substantial growth in farms with sales exceeding \$100,000.* Nearly 5 percent of all farms are foreseen in the "over \$100,000" category—compared with about 2 percent last year. Farms in this class are expected to garner over half the total receipts from farm marketings. Close to a third of 1980's farms will have cash receipts surpassing \$20,000.

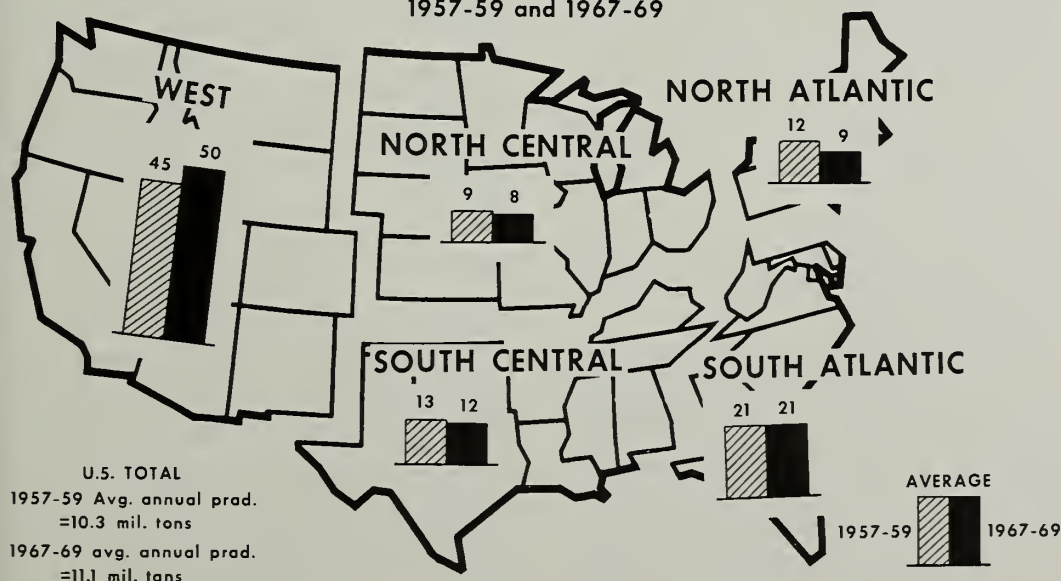
*Decline in farms with sales under \$2,500.* But the demise of small farms—largely rural residences—is not in sight. Though their numbers will drop sharply, small family farms will continue—as in 1970—to make up over a third of all farms. Their share of projected farm receipts for 1980, however, is only 1 percent.

*Rise in total value of production assets.* Value will grow about 20 percent from 1970 to 1980, somewhat less than during 1965–70 when sharp price advances pushed value of assets up around 30 percent.

*Continuing downtrend in labor requirements.* The farm labor force of 1980 may number 2.5 million workers—a decline of 1.3 million from the 1967–69 average. Behind the reduction is further substitution of capi-

### PRODUCTION OF VEGETABLES FOR FRESH MARKET

Each Region as Percent of U.S. Total  
1957-59 and 1967-69





tal for labor, and stepped-up output per man hour. Also, mounting use of purchased services will eliminate many tasks now performed by farm operators or hired labor.

*Little change in harvested acreage.* Yields per acre will continue to climb—perhaps fast enough to match anticipated growth in demand. Thus, total acreage needed for crops may not increase much from the approximately 300 million acres harvested annually in recent years. (2)

## Sprinkler Systems Differ Markedly in Costs

A cost study of three sprinkler irrigation systems in the Texas High Plains pegs the hand moved sprinkler system the least expensive in distributing water.

Considering capital outlay and operating costs, the researchers arrived at a cost of \$10 per irrigated acre for the hand moved sprinkler system, \$13 an acre for the side roll sprinkler system, and \$20 an acre for the center pivot system.

The study assumes application of 16 inches of irrigation water per acre on 136 acres.

The center pivot system, in irrigating the 136 acres for 1200 hours, required 104 man-hours and had an investment cost of \$22,163. The side roll sprinkler system required 232 man-hours and had an investment cost of \$11,539. The hand moved sprinkler system required 437 man-hours and had an initial investment of \$5,065.

With labor priced at \$1.75 an hour, total operating costs for irrigating 136 acres would be \$324 for a center-pivot system, \$548 for a side roll system, and \$838 for a hand moved system. Annual overhead costs, reflecting the difference in investment, came to approximately \$2,400 for the center pivot, \$1,230 for the side roll system and \$570 for the hand moved system. Overhead costs per acre for irrigating 136 acres were \$18, \$9, and \$4, respectively for the center pivot, side roll, and hand moved systems. (3)

## New Vaccine To Put More Eggs in the Basket

USDA has developed a new vaccine that may well be a shot in the arm for the poultry industry.

The vaccine is for Marek's disease, estimated to cost the industry \$200 million in losses each year in the U.S. alone.

One of its benefits is expected to be felt this year in the form of bigger egg production, ERS reports.

Even without the vaccine, ERS sees the egg industry increasing production this year because of a slightly larger laying flock and a higher rate of lay. Output in '70 was 195 million cases.

But with the vaccine, which went on the market earlier this year, the industry anticipates protected pullets will overcome their usual high mortality rate. The pullets will be healthier, and, when they join the laying flock, lay more eggs.

Thus the laying flock is expected to be larger than last year's through most of 1971 despite sharply reduced hatchings for replacements and increased culling of older flocks.

The vaccine, now being used primarily by breeders of egg production stock, protects chicks from the development of the lesions associated with Marek's disease, a leading cause of mortality in chickens. (4)

## Higher Prices, Pollution May Reduce Fertilizer Use

This year, fertilizer—long one of a farmer's least worries—is bidding for more attention.

Its price, which had gone down rather consistently for 10 years, began to go up in 1970. This year, prices may climb 10 percent.

Its effect on the environment is putting fertilizer in the limelight, too, and research is underway to determine just how much pollution it may cause.

The importance of fertilizer has grown rapidly since 1950 when farmers used only 2.6 million tons. In 1970, they used 10.8 million tons.

Higher use of fertilizer is one of the major reasons U.S. farmers are producing 40 percent more food and fiber on 10 percent fewer acres than in 1950.

One recent study indicates farmers may cut back on fertilizer if costs continue to go up. The study, of the fertilizer situation in Illinois, states that increased costs there may mean farmers will switch from present build-up application rates to recommended row-usage rates.

Illinois uses more primary plant nutrients than any other State. Consumption increased twelvefold in the 1950-67 period.

The future is not that bright for that State's fertilizer industry. Farmers have, on the average, been using recommended build-up application rates for phosphorus and potassium. Within a few years, only maintenance applications will be needed. Nitrogen use—which swelled around 25 percent each year in 1950-69—is expected to increase by 4-6 percent during the next several years if corn acreage remains near the 1968-69 level. However, this growth rate could be constrained even more if pollution-control measures are introduced to restrict the farm use of nitrogen.

Nitrogen and phosphorus, both essential for plant growth, are the nutrients that have put fertilizer into the pollution spotlight.

One side of the problem is the accelerated eutrophication in water bodies, where accumulation of nutrients (primarily nitrogen and phosphorus) has resulted in excessive algae blooms and undesirable plant growth. Eutrophication renders these waters less suitable for drinking, recreation, and other uses.

There is some evidence that a high nitrate content in drinking water, either surface or groundwater, may poison the bloodstream, particularly in infants and ruminant livestock.

High nitrate accumulation in plants raises questions about a possibly dangerous buildup in some foods. Certain vegetables, such as spinach and beets, normally accumulate large amounts of nitrates. This accumula-



tion can be increased through use of fertilizer.

Very little is known about how much fertilizer moves in either surface or groundwater, nor do we know how much of the nitrogen and phosphorus in our water supply actually comes from fertilizer.

There are, though, ways to reduce pollution from fertilizer use.

They include (1) developing fertilizer with slower release of all nutrients to enable more complete utilization by plants; (2) improving cultural practices and timing of application to prevent leaching and erosion; (3) improving methods of application such as placement of fertilizer closer to the plant root zone to improve utilization by plants and reduce the potential for leaching and erosion; (4) applying smaller but more frequent applications of fertilizer to keep pollution within an acceptable level.

Another means of reducing pollution from fertilizer would be to simply limit or restrict its use.

A study on effects of restriction was recently published by Iowa State University. It reports that a complete removal of fertilizer would cause a sharp reduction in crop yields, high crop prices, reduced livestock production, and a large cutback in exports, even if all Government-diverted acres were to be released for crop production. Corn yields in the Corn Belt, for instance, would be decreased by more than one-third if all nitrogen use were banned. Farm prices would increase, but the increase in consumer food costs would be almost double the tax savings from reduced land retirement payments.

With current economic incentives and without restrictions, farmers would continue to use large quantities of fertilizer and increase its use, according to some economists.

While complete restriction would be untenable, limited controls would probably result in only moderate increases in costs of production and prices of agricultural commodities. (5)



## *Men and Milestones*

*THE FAR EAST, 1929—An American has arrived to begin a 2-year extensive study of soybeans, an unimportant crop in the U.S.*

That "unimportant crop" today is second only to corn in value—\$2.8 billion in cash receipts in 1970 according to preliminary estimates. Output was a record 1.1 billion bushels.

William J. Morse was the American adventurer, going through China, Manchuria, Korea, and Japan from 1929 to 1931 to bring back to USDA hundreds of varieties of soybeans plus an encyclopedic knowledge of soybean culture.

Largely through his enthusiasm and effort, the Department led the way in making soybeans the important food, feed, and industrial crop it is today. At the time of his study, the U.S. was producing less than 10 million bushels annually.

Morse's development of the soybean supplied the country with varieties suitable for various localities, increased the oil content of some types, and made other varieties better adapted to food use.

A graduate of Cornell University, Morse had come in on the ground floor of soybean studies. He joined the Department in 1907 just as its Bureau of Plant Industry was planning research on growing soybeans.

The development of the plant into a major U.S. crop, however, came only after many years of research. The real growth in large-scale production began during World War II, a growth that continues today.

Renowned throughout the world for his work in soybean development, Morse retired in 1949 after 42 years with the Department.

He had served three times as president of the American Soybean Association, published more than 75 bulletins and articles on soybeans and co-authored *The Soybean*, published in 1923 and long referred to as "the soybean bible." And he had seen soybean production grow to over 200 million bushels.

He died in 1959, 30 years after that important departure to the Far East that would play such a major role in the development of the "unimportant" soybean. (6)



## Farmer Can Keep Rein On Livestock Feed Costs

A farmer can, while still adequately feeding his livestock, reduce the bite feed takes from his income.

That's one of the points made by ERS in a recent analysis of differences in feed prices in 48 States.

Two facts appear again and again in the study—that purchase of feed in bulk is cheaper than its purchase in bags and that each percent of protein adds significantly to the cost of feed.

One reason the cost differences among feeds is of great interest to livestock producers is that feed costs have gone up substantially since 1960 and account for roughly one-fifth of a farmer's production expenses.

The ERS study, based on data from a 1966-67 general farm survey, covers complete feeds, supplements and shelled corn. In brief, the economists found:

- For complete feeds, bulk purchases during the late 1960's saved 6 to 72 cents a hundredweight (cwt.) and averaged 33 cents less than bagged purchases. For supplements, bulk buying saved an average of 37 cents per cwt. and for shelled corn, 25 cents.

- Each percent of protein increased the cost of feed significantly—by 3 to 20 cents per cwt. Thus, ERS advises growers to carefully

choose feeding formulas and avoid waste in feeding programs.

- The large-scale operators—those with \$1 million or more in livestock sales annually—enjoyed a decided cost advantage. Some savings were small, but some, such as soybean meal (saving of \$2.25 per cwt.), were substantial.

- Prices were usually lower near production regions and near barge transportation facilities.

- The place of purchase made a difference, but no one place was consistently lower. For example, of 38 comparisons between wholesalers and retail cooperatives, wholesalers were less expensive in 22 instances and retail cooperatives, in 16 instances.

- Cost differences among brands appeared to be important only in complete dairy feeds. National dairy brands averaged 33 cents more per cwt. than local brands. (7)

## Why Farmers Replace Tractors

Farmers don't always wait for their old tractors to wear out before replacing them with newer models. The decision to buy or trade often hinges on the demands of the farming operation.

A survey in the Columbia Basin and wheat-pea regions—two nearby but agriculturally different areas of Eastern Washington—revealed that nine-tenths of the farmers had

bought or traded at least one tractor in the previous 5 years.

Only a tenth of the Columbia Basin farmers said they replaced tractors because their old models had worn out. Many of these farmers said they were increasing farm size or expanding their operations, and therefore needed a larger model.

The Columbia Basin is well irrigated, suitable for a variety of crops, and marked by rapid technological advances. Machinery obsolescence was reported as an important reason for tractor replacement. Over a fifth of the Basin farmers bought because they needed a newer model for special purpose jobs or to accommodate special equipment.

Three crops—wheat, barley, and peas—dominate the agriculture of the wheat-pea region. Farms in this area were generally larger than in the Columbia Basin.

With most farms at optimum size and a heavy reliance on so few crops, the machinery requirements of the wheat-pea farmers were fairly stable. Close to 40 percent bought tractors because their old ones were no longer dependable.

Close to half the farmers said that dealer service was not an important consideration in deciding to buy a particular make of machine. Some reported that price was their only criterion. Others said they tended to stay with the same make.

The majority of wheat-pea farmers who claimed dealer service was important added that higher machinery prices can be justified if the dealer extends reliable service. For Columbia Basin farmers—who usually had less on-farm repair facilities—proximity of the dealer was the major consideration.

Two-thirds of the farmers who purchased tractors in the 5-year period stated that income tax allowances and depreciation had “no effect” on their decisions. Moreover, most said they used the straight line method to depreciate their machinery, rather than taking advantage of more rapid depreciation write-offs permitted by law. (8)

### PRICES FOR COMPLETE FEEDS VARY BY REGION

	Dairy	Beef	Hogs	Poultry
<i>Dollars per cent in 1966/67</i>				
Northeast	3.97	3.85	4.42	4.19
Appalachia	3.95	3.53	4.75	4.39
Southeast	3.56	3.82	4.42	4.15
Delta	3.77	3.57	4.25	No rpts.
Corn Belt	4.12	3.82	5.01	3.97
Lake States	3.76	5.05	5.46	4.68
Northern Plains	3.23	3.66	4.10	3.41
Southern Plains	3.62	3.68	3.63	5.07
Mountain	3.67	3.73	4.25	3.24
Pacific	3.43	3.54	4.25	3.61
U.S. Average	3.86	3.70	4.85	4.13



# Rural Blacks In The City

*They came with less education and fewer job skills, but the rural blacks who moved to the cities had earnings as high as native black residents in 1966.*

The black farm population was whittled in half during the 1960's. By last year, only 1 million blacks lived on farms.

Not all these migrants left for the large metropolitan centers, but the majority did. They were joined by millions of other rural blacks of non-farm origin.

How are these black migrants doing in the cities?

The best indication comes from the files of the Office of Economic Opportunity, which in 1967 sponsored a national survey of 30,000 households. The results of that survey have since been analyzed by ERS cooperating with the University of Georgia.

The gist of their findings:

✓ Heads of the migrant families, despite having fewer years of schooling, succeeded in earning incomes as high as those of the native black residents.

✓ Migrants had no higher incidence of poverty than the urbanites.

✓ In almost every respect, the economic/educational status of the migrants was far superior to blacks who had stayed in rural areas.

To be classified as migrants, survey respondents must have moved a distance of at least 50 miles since childhood. By this definition, there were in 1967 an estimated 9 million urban black migrants 17 years and over. About 2 million had come from a rural area; half had left the South and settled in the North or West.

Of the rural-to-urban black migrants, three-quarters were living in the central cities. Only 12 percent had gone to nonmetro urban places (those with populations of less than 50,000 people), compared with 25 percent of the white rural-urban migrants.

*Educationally*, the black migrants averaged 8/10 of a year more school-





ing than blacks living in rural areas, but about 2 years less schooling than the black natives of the city. However, the rural migrants were generally older than their urban counterparts. The 2-year difference was found only above age 30. In the 17-29 age group, essentially the same proportion of migrants and natives had completed high school. To a partial but unknown extent, the migrants got some of their education after their move to the city.

*In the job market*, the male migrants were as likely to have had some employment as their urban-reared neighbors during the year prior to the survey. A higher proportion of the working migrants held full-time jobs (50-52 weeks). They worked mainly in manufacturing and service industries in "blue collar" jobs. The blacks of urban origin were a little more likely to have "white collar" positions, such as in public administration and professional services, or to be craftsmen.

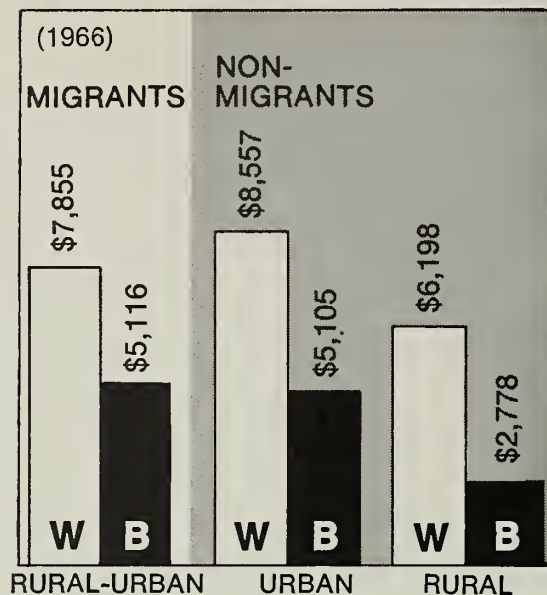
*Financially*—despite some disadvantages in education and type of employment—the families headed by black migrants had about the same average income as other black urban families. The median income of migrant families came to \$5,116 in 1966 compared with \$5,105 for blacks reared in the city. And, the median income of the migrants was nearly twice that of the black families still living in rural areas.

*The incidence of poverty* among the two populations was almost identical. Of rural-urban migrants 17 years and older, 26.6 percent were in poverty by the standard Federal definitions that are based on annual income related to number, age and sex of family members, and farm-nonfarm residence.

The percentage was 26.9 for the black urban population of urban origin. In both groups, however, the incidence was much greater than in the white population, of whom a tenth were in poverty.

The sharpest difference in the poverty statistics showed up in a comparison of poverty in the migrant

## MEDIAN FAMILY INCOME \*

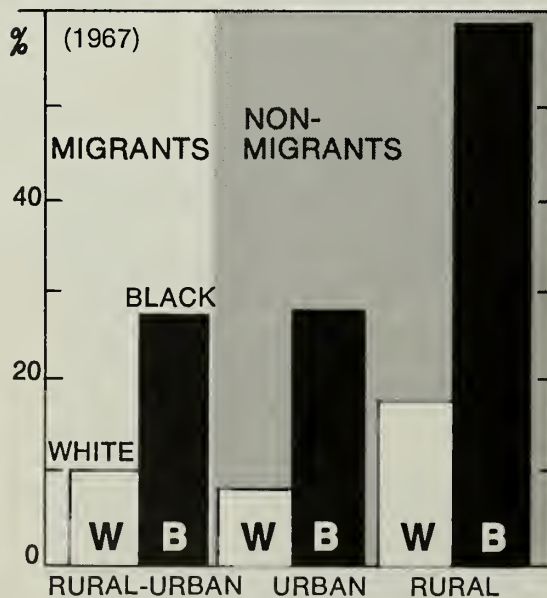


\* Population 17 years old and over by 1967 residence and residence at age 16 or earlier.

group and that in the black rural population: nearly 60 percent of rural blacks were below the poverty line, versus around 27 percent for the rural-urban migrants.

The lower fertility rate of migrant women may account for part of this difference, inasmuch as poverty is generally more common in larger families. The number of children born per 1,000 urban black women of rural origin (35-44 years old) was 3,360—more than 30 percent lower than the 4,937 children born of women still living in rural areas.

## INCIDENCE OF POVERTY\*



\* Population 14 years old and over by 1967 residence and residence at age 16 or earlier.

Moreover, the fertility rate of the rural-urban black migrants proved to be no higher than that of the urban natives.

*Dependence on public welfare* was somewhat higher for the black families and individuals who had migrated to the city. Welfare assistance was received by 17.3 percent of the migrant families (by 15.6 percent of the urban natives) and 17.6 percent of unrelated individuals (14.4 percent of the urban natives). Black families of rural origin in the city were less likely to need welfare assistance than their rural cousins.

About future trends in black migration to the cities, the researchers believe the exodus is slowing but by no means is it over. Migration will decline because the rural base is much smaller than during the fifties and sixties.

This particularly applies to the farm population from which so many people came. Also, a recent surge in manufacturing jobs in rural America provides new incentive for country dwellers to stay put.

However, these forces will be counterbalanced by others that will insure continued outmigration in the next few years. One such force is the high fertility rates of the black rural population. They currently bear enough children to more than double their population every generation. In some areas, growth in the labor force far exceeds growth in new jobs.

Another factor: black rural youths evidently have a strong preference for city living. A study in East Texas, for example, showed that 63 percent of black students in high schools wanted to live in a large city. The figure for white youth was 16 percent. Similar results were reported in a Florida study.

Talking about the black farm population only, this much seems certain: the statistical odds speak against an exodus of the likes of the sixties. If the same number were to leave the farms in the next several years, by 1976 there would be not one black family remaining in the farm population. (9)



## Farm Mortgage Loans Gain In Size, Drop in Volume

The rising value of farm units over the past decade is reflected in the staggering growth in average size of farm mortgage loans.

Last year, the average size reported by life insurance companies was \$82,220—compared with \$23,630 in 1960. Meantime, the average for the Nation's 12 Federal land banks jumped from \$12,850 to \$31,570.

While farm mortgage loans have spiraled upward in average size, the volume of new loans (total farm mortgage lending) has been on the downtrend.

In the last half of 1970, new money loaned by the three reporting lender groups—life insurance companies, Federal land banks, and the Farmers Home Administration—was 8 percent over the levels of the last half of 1969. But for 1970 as a whole, the volume of new money loaned—\$1.2 billion—was more than 20 percent below a year earlier.

The volume reported by Federal land banks for 1970 was 12 percent under 1969's. At the same time, new money loaned by the FHA was down 45 percent, although activity gained momentum during the last quarter of 1970.

In addition to the direct farm mortgage loans by the three reporting lenders, the Farmers Home Administration insures mortgage loans for farm ownership and rural housing. The total amount of insured loans outstanding on September 30, 1970 was 28 percent higher than a year earlier.

Record high interest rates last year were primarily responsible for the low volume of farm mortgage lending. Life insurance companies reported an average rate of 9.39 in second-half 1970. Earlier in the year, seven Federal land banks were charging 9 percent, the others, 8.5.

By the close of last year, interest rates began to soften. They continued to drop through the first quarter of this year, and volume showed signs of picking up. (10)

### *Back to the Woods*

If "you can't see the woods," it's not "for the trees" but for the people.

According to a computerized count by the Forest Service, use of the 154 National Forests during 1970 totaled 172.5 million "visitor days," or 47,282 years. This was 10 million more days than in the previous year, and an alltime high. (A visitor day is the equivalent of one person spending 12 hours in forest areas, or 12 persons spending 1 hour each, or any combination totaling 12 hours.)

Records show the most popular recreational activity to be the back-to-earth hobby of camping. Campers chalked up almost a quarter of total visitor days spent in the National Forests last year. Following close on the heels of the campers in the popularity poll were people on drive-through tours.

California's forests logged more visitor hours than any other State. For the third consecutive year, the San Bernardino National Forest in Southern California, with 5.6 million visitor days, was one of the most popular in the United States for picnicking, bird watching, or just enjoying the scenery.

Anticipating this year's traffic will be even heavier than in 1970, foresters in some areas have initiated a limited entry or passport system to protect certain uniquely scenic regions and fragile terrain from being overused by tourists and recreationists. (11)

## Poverty Dug Deeper In 1970

The number of persons in poverty went up in 1970, after 9 years of steady decline.

The Nationwide increase of 1.2 million persons brought the total in poverty to 25.5 million. They represented 13 percent of the U.S. population, according to the Bureau of the Census. (In 1960 the proportion was 22 percent.) Economic recession and high unemployment were largely responsible for the increase.

The incidence of poverty rose among whites and blacks alike, and in both metropolitan and nonmetro-

politan areas of the country.

The distribution of poverty between nonmetro (rural/small city) and metro areas was essentially unchanged from 1969. Of the nonmetro families, 2.6 million—about 14 percent—had incomes below the poverty line in 1970, compared with 2.5 million a year earlier. The poverty rate among farm families was 19 percent, and among nonfarm families, 10 percent.

In the metro areas, 2.7 million families were in poverty last year, or 8 percent of all metro families. The number was 2.4 million in 1969. (12)

## New Approaches Needed To Retrain Rural Poor

Many of the rural poor, before they can be retrained, must be sparked with a desire to do better.

For many—more than half in a recent 5-State study—have no interest in job retraining.

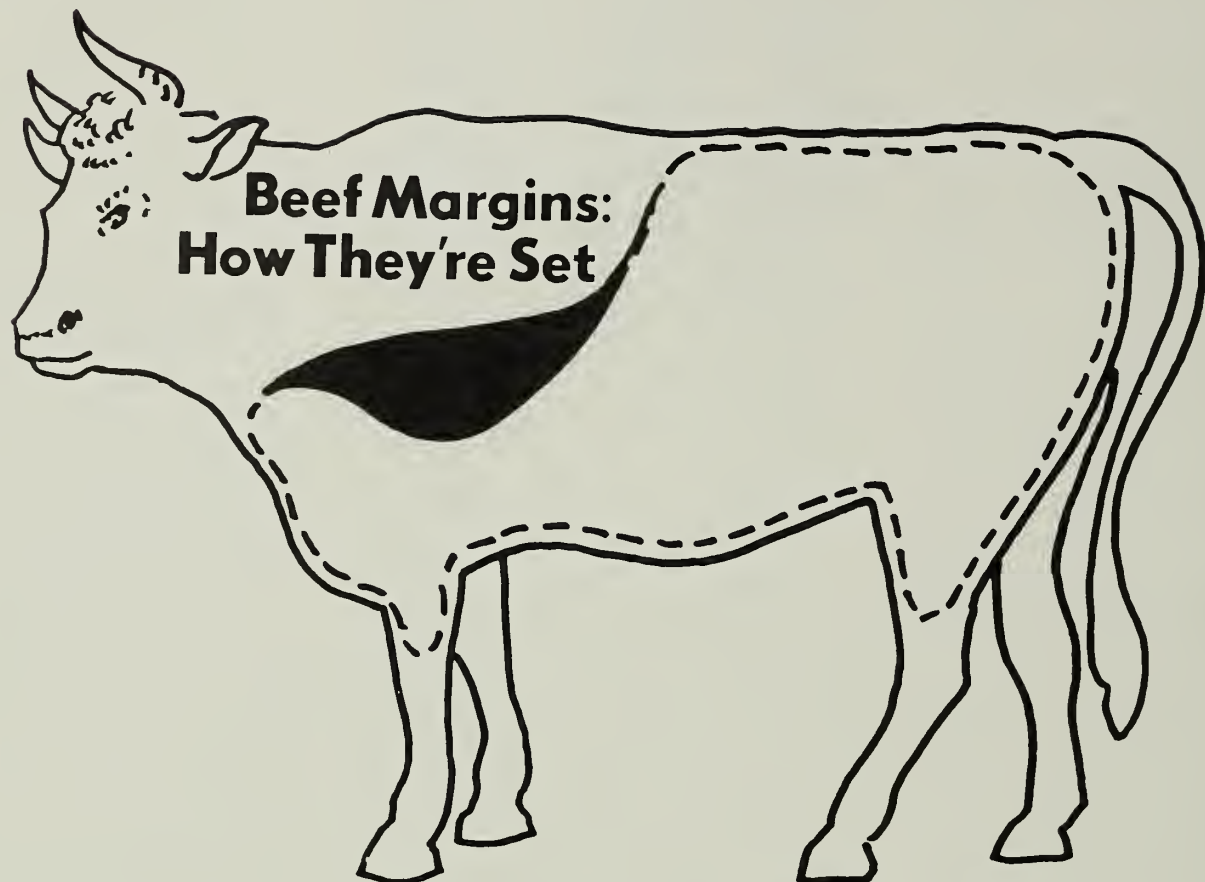
The study, by ERS and Michigan State University, covered Ohio, Indiana, Illinois, Michigan, and Wisconsin.

While more than half of those with earning potential expressed no interest in retraining, the study found substantial numbers (between 19 and 37 percent) who would be enabled to earn adequate incomes through job retraining programs.

If new ways of recruitment and retraining were initiated and aimed at those not now interested, many more could reach adequate income levels.

The researchers found that at the time of the study, more than one-fourth of all the rural residents in the area over the age of 15 lacked the skills necessary to earn a decent income.

Innovative approaches and programs are needed in order to train the poor with earning potential in this 5-State region. And, if emphasis is to be on helping the most needy, job retraining must be supplemented with basic education and with employment aids such as job counseling, placement, and relocation assistance. (13)



*Beef margins are usually based on retail prices per pound, but to help cattlemen better understand price spreads, marketing margins are calculated here in terms of a 1,000-pound steer.*

Livestock ranchers and feedlot operators sometimes find it difficult to translate USDA price spread figures on beef into marketing margin terms that fit their own experience.

Some cattlemen have indicated they could better understand USDA beef price spreads if worked out as margins in terms of a whole steer as it moves from farm to retail.

Cattlemen think in terms of live-weight prices. Their steers may run 1,000 pounds or more, and prices are quoted in hundredweight units.

USDA reports prices and price spreads per retail pound. The yield of beef from a steer amounts to roughly two-fifths of the animal's live-weight, so the retail prices per pound are over twice as high as the per-pound live weight prices.

In the margin figures shown in the table p. 13, value per head is calculated for the live animal, the beef carcass, and the corresponding retail cuts. (This procedure avoids the confusion of comparing prices per pound.)

For the beef marketing system, two gross margins are calculated—farm-carcass, and carcass-retail; they add up to the farm-retail margin.

The farm carcass margin is the difference between the farmer's return for the carcass beef portion of

his steer (referred to in USDA data as net farm value) and the packer's gross return for that carcass. It excludes hides and other byproduct items. Likewise, the spread in value between the packer's price for the carcass and final returns from consumer purchases is called the carcass-retail margin.

Put together, these two components make up the estimated farm-retail margin—the beef value sold by retailers less the net farm value.

The table here shows the gross receipts and gross margins for a 1,000-pound Choice steer during 1966-70 and 1st quarter 1971.

To illustrate how the margins were calculated for the last quarter of 1970:

At the feedlot, the farmer sells his 1,000-pound Choice steer to a packer



for \$273.80, or about 28 cents per pound, less \$5.80 for transportation and marketing charges.

Of this total, \$19.44 is the farm value of byproducts—tongue, tripe, liver, hide, etc.—weighing a total of 193 pounds. (Byproducts are not priced at the farm so their equivalent farm value must be estimated from wholesale prices.)

To arrive at the farm value of the beef portion of the steer, the byproduct value is subtracted from the live-weight selling price: \$273.80 — \$19.44 = \$254.36. The result is then used to calculate the marketing margins.

After removal of byproducts and waste, the steer carcass weighed 620 pounds. At a carcass price of 42 cents per pound, the packer's return in this example would be \$285.32. Thus, the farm-carcass margin is \$30.96 (\$285.32 less \$254.36).

The retailer trims the 620 pound carcass into 463 pounds of cuts, but because of a 5-percent shrink, he usually sells only 439 pounds. Retail shrink includes losses in value from spoilage and pilferage.

The retail gross value for the 439 pounds of meat—sold at an average of 97.4 cents per pound—is \$427.98. The margin from carcass to retail is \$142.66. This figure, added to the

farm-carcass margin, brings the total farm-retail margin to \$173.62.

Despite considerable year-to-year fluctuation, the gross farm-retail margin has expanded markedly since 1966. The greatest increase was at the carcass-retail level, as the table shows.

In general, gross margins widen when higher operating costs can't be offset by stepped-up efficiency. For example, over the past 8 years packers have held costs down by locating new plants near major beef producing regions. This reduced transportation expenses. And in some cases, the shift to rural areas meant lower labor costs.

Nevertheless, the farm-carcass margin has gradually widened. Rising wage costs have partly offset the gains in efficiency.

The packers' efforts to pare costs have probably contributed to the wider carcass-retail margin by pushing bigger expenses toward the retailer. With packers located near producers, higher shipping costs for longer distance hauls—accompanied by a general rise in freight charges—have increased beef costs to the retailer.

In addition, retailers' operating costs are up too; thus the wider margin. (14)

## Substitutes Share Cream Of the Dairy Market

Substitutes have whipped up a big following in the dairy section of today's supermarket.

Substitute toppings, for example, have taken about half the market for whipped toppings.

Nondairy coffee whiteners have taken about 35 percent of the market for light cream.

And margarine, long a competitor of butter, now has about two-thirds of the market for table spreads.

The substitutes for light and heavy cream are expected to continue to take away sales from their prototypes. But margarine, despite remarkable past gains, is not expected to continue its rapid cut into the butter market. Its rate of market penetration has slowed, and it will make fewer inroads into the market for butter in the next 10 years. The growth curve for margarine indicates that it is becoming progressively harder to capture a bigger share of the butter market. Remaining consumers prefer butter for its taste, prestige, or other factors.

Last year, per capita figures put margarine consumption at 11 pounds and butter around 5 pounds. One of the reasons for margarine's growth

PRICE SPREAD PER HEAD FOR BEEF PRODUCED FROM 1,000-POUND CHOICE GRADE STEER

	1969												1970				1st Qtr 71
	1966	1967	1968	1st Qtr	2nd	3rd	4th	1st Qtr	2nd	3rd	4th						
DOLLARS																	
Total value of retail cuts (for 462.5 lbs. of cuts less 5% shrink equals 439.4 lbs. sold)	362.07	362.94	380.52	395.90	429.73	443.79	423.14	431.05	436.32	439.84	427.98	440.72					
Total value of carcass sold by packer (for 620 lb. carcass)	256.93	261.21	277.51	290.41	327.92	306.47	282.78	301.51	304.73	309.19	285.32	320.11					
Total farm value of 1,000 lb. steer (excludes transportation and marketing charges)	252.80	250.00	265.50	279.60	321.50	297.90	275.80	291.20	295.60	298.40	273.80	303.30					
Less farm value of by-products	23.26	17.25	16.46	17.61	20.90	22.34	21.24	21.84	21.28	20.29	19.44	19.11					
Net farm value of 1,000 lb. steer	229.54	232.75	249.04	261.99	300.60	275.56	254.56	269.36	274.32	278.11	254.36	284.19					
Gross margins for beef sold:																	
Carcass-retail	105.14	101.73	103.01	105.49	101.81	137.32	140.36	129.54	131.59	130.65	142.66	120.61					
Farm-carcass	27.39	28.46	28.47	28.42	27.32	30.91	28.22	32.15	30.41	31.08	30.96	35.92					
Farm-retail	132.53	130.19	131.48	133.91	129.13	168.23	168.58	161.69	162.00	161.73	173.62	156.53					



is its relatively low cost—a third that of butter.

Among substitutes for fluid milk, the future is less certain.

Sales of filled milk (made of vegetable fat and nonfat milk solids, either fresh or reconstituted skim milk) have been restricted by laws in a number of States. As a result, total sale of filled milk is only a fraction of a percent nationally.

Synthetic milk, with no whole milk components, is not being used in any significant quantity in the U.S. (15)

## Food Handlers' Costs Rising at Rapid Clip

The price of intermediate goods and services bought by food marketing firms leaped 6 percent in 1970—twice the average rate of recent years and the sharpest gain since 1951.

The overall goods index rose 5 percent, which was equivalent to the total increase during the 1960–69 period. Intermediate goods include fuels, packaging materials, office and automotive supplies and similar items but exclude raw materials.

Biggest change was in fuel, power, and light. Their price index jumped 9 percent, after being relatively stable for many years.

The index of services was up almost 7 percent. Services include rent, laundry and cleaning, banking and insurance, and building and other repair work. (16)

## Ample Cocoa Stocks Hold Chocolate Prices Down

Prospects for cocoa marketings are a bit brighter this year with a world bumper crop in sight.

The current crop of cocoa beans is expected to be about 4 percent higher than a year earlier, and nearly 20 percent above 1968/69.

As in 1970, output is expected to surpass use. This follows 4 consecutive years of deficit production, with both U.S. and foreign stocks drained to low levels.

After dropping nearly half a

pound from 1968 levels, U.S. per capita cocoa use remained steady at slightly under 4 pounds throughout 1969 and 1970. Bigger world supplies and lower prices last year prevented a further decline in consumption.

This year, however, cocoa use is expected to pick up slightly as supplies grow larger and prices drop even further.

Wholesale cocoa bean prices averaged 28 cents per pound during the first quarter of this year—down more than 7 cents from first quarter 1970. Cocoa butter prices also dropped considerably. Ample supplies of both are expected to hold prices down.

As other retail prices continue to climb, those for chocolate bars and chocolate flavored sirup are virtually unchanged from late 1970. With wholesale prices of beans and semi-processed products fairly stable, retail chocolate and cocoa prices will probably remain at current levels for some time. (17)

## Wheat Stocks Shrink To 3-Year Low

Not since mid-1968 has the stockpile of U.S. wheat been so small.

Moving into the new marketing year, the carryover is estimated at 709 million bushels, versus 885 million on July 1, 1970. Factors in the drawdown include the smaller 1970 wheat crop, continued heavy wheat feeding, and high-level exports.

In fiscal 1971, which closes June 30, exports totaled about a fifth higher than last year's 600 million-plus bushels. Up sharply were shipments of hard winter and hard spring wheats.

Due to last year's corn blight and questions of whether it will be around again in 1971, wheat prices have been especially competitive with corn's this year. Prices to producers have generally been above both the loan rate and year-earlier levels for most of the crop year.

It's likely that summer wheat prices will continue to average somewhat above the loan. (18)

## Pickles Pack Power In Vegetable Market

Pickles are the pick of the barrel right now among percentage gainers in the processed vegetable market.

Their popularity skyrocketed 57 percent from the late 1950's to the late 1960's as shown by the increase in cucumbers grown for pickles. Their growth rate is among the highest of all vegetables for processing.

The reason? The large expansion enjoyed by snack foods generally, plus an added push from the industry itself.

Each American, on the average, last year ate more than 7 pounds of pickles. Only 30 years ago, the per capita figure was under 3 pounds.

Pickle Packers International, the industry's trade association, figures about a third of the Nation's pickles are sold to the food service industry and the remainder go on the grocery store shelf.

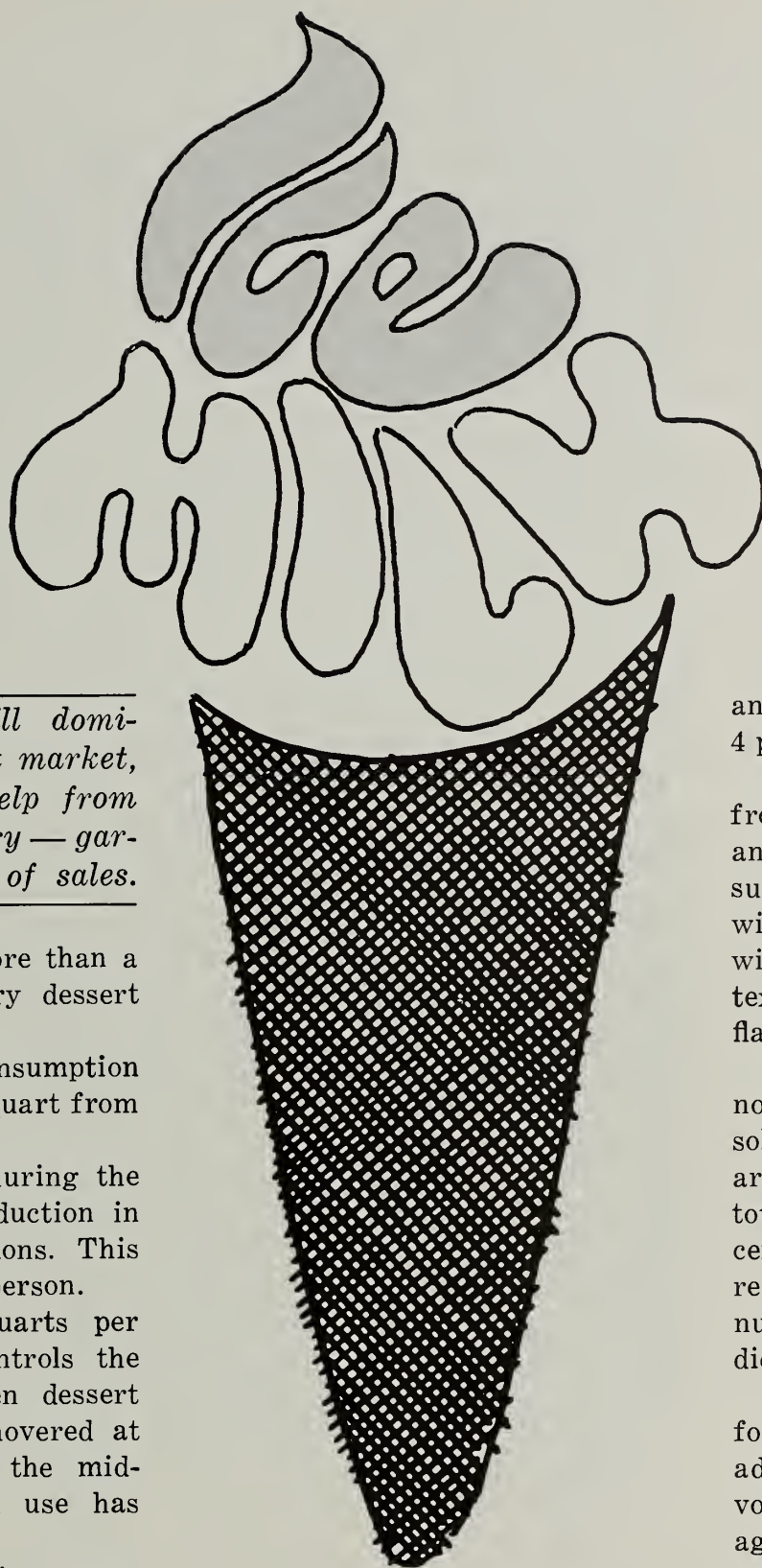
The slivers of pickle served with a hamburger, the relish on a hot dog, the tidbits in potato salad all are part of the billion-plus pounds of cucumbers grown for pickles last year in the U.S.

The industry has come up with slogans and reminders, new packaging and products, and the sales have shot up. Displays let you know it is "Pickle Week" in May, or that in the fall it's "Shape Up With Pickle Time."

A new seedless pickle is being introduced this year, and then there is the pickle cube ( $\frac{3}{8}$ " square, designed for salads). For the true snack eater, there are even pickles-on-a-stick. Pickles are largely an impulse item, and they have profited from all these plugs by the industry.

On a national level, pickles are produced in 39 States—a far wider distribution than most vegetables for processing. Michigan has long been the most important producer, but is being challenged by North Carolina. These States—with Wisconsin, Ohio, South Carolina, Texas, and California—produce more than 60 percent of our pickles. (19)





*Though ice cream still dominates the frozen dessert market, ice milk—with some help from the soft serve industry—garners a mounting share of sales.*

Ice milk has scooped more than a fourth of the frozen dairy dessert market.

Last year, per capita consumption of ice milk was up over a quart from 1960.

After nearly doubling during the past decade, ice milk production in 1970 hit 278 million gallons. This came to over 5 quarts per person.

Ice cream, with 15 quarts per capita last year, still controls the lion's share of the frozen dessert market. But output has hovered at the 15-quart level since the mid-1950's, whereas ice milk use has gained steadily every year.

Many people consider ice cream the finer product. Sold in a wider variety of flavors, it's thought to have a richer and fuller taste. Nevertheless, ice milk has several advantages to account for its growing popularity. Among other things, it's generally less expensive than ice cream, lower in calories, and is well suited for use in soft serve machines.

Ice milk and ice cream are made the same way, but they differ in con-

tent of milkfat. Federal standards for plain ice cream prescribe a minimum of 10 percent milkfat, or butterfat. Good quality ice creams usually contain 12 to 14 percent milkfat; premium grades up to 18 percent.

Federal standards for ice milk specify butterfat content between 2

and 7 percent; the average is around 4 percent.

Butterfat's main contribution to frozen dairy mixes is smoothness and body. The milkfats also impart a subtle rich flavor so often associated with premium grade ice cream. Thus, with a lower fat content, ice milk's texture is generally coarser and its flavor less refined.

Ice milk usually has slightly more nonfat milk solids, but less total milk solids than ice cream. Federal standards set an 11-percent minimum for total solids in ice milk, and 20 percent for ice cream. The ice cream requirement can be adjusted if fruit, nuts, chocolate, or other bulky ingredients are added to the mix.

In ice milk, no allowance is made for bulky ingredients. Moreover, the addition of artificial coloring or flavoring must be declared on the package. Ice milk should contain 1.3 pounds of solids per finished gallon; ice cream, 1.6.

A gallon of either product must weigh at least 4½ pounds. This assures consumers that the manufacturer hasn't incorporated too much air in the mix. (Federal standards allow producers to infuse enough air into a gallon of mix to create not more than 2 gallons of the finished product.)

Ice milk production probably re-



ceived its biggest boost with the emergence and continued growth of the soft serve industry. Soft serve is either ice cream or ice milk that's held in hardening cabinets less than 12 hours, or dispensed directly from freezer units.

About half of all manufactured ice milk—compared with an insignificant share of ice cream—is used by the soft serve industry. Thus, almost all the “soft ice cream” swirled from machines into cones or sundae dishes at frozen dessert counters is really ice milk.

Ice milk used for soft serve has several advantages. The ice milk mix presents fewer technical problems in processing and handling before being used in soft serve freezers. And it's more economical to produce.

Ice milk also has a colder taste sensation than ice cream—a strong incentive to queue up for a cone at the drive-in dessert stand.

The mushrooming of fast food franchises that feature machine-made milkshakes has also spurred ice milk production. The liquid shake mixes used by the fast-service chains usually have a fats and solids composition falling in the ice milk category.

In retail food stores, ice milk—in hard packaged form—scoops a growing share of ice cream sales. Though ice cream prices rose only 2 cents per half gallon over the past decade, many price-conscious consumers have switched to ice milk: it ranges 10 to 20 cents less per half gallon.

The growth in ice milk sales also reflects a shift in consumer preferences toward lower fat products. Weight watchers who must occasionally indulge a sweet tooth often turn to ice milk, as it's somewhat lower in calories than ice cream.

The actual calorie content of either product is highly dependent on how much air was infused in the mix, and the percentage of fat in the product. In general terms, however, one serving—about 2 scoops—of plain vanilla ice cream contains only about 50 more calories than ice milk. (20)

## Milk Bottle's Popularity Shattered by Cartons

After nearly 100 years of service, the glass milk bottle is fast approaching retirement.

In 1969 about 80 percent of fluid milk was sold in paper containers, compared with 65 percent in the early 1960's. Always important on wholesale routes, paper recently overtook glass containers as the most popular on home-delivery routes.

Although paper cartons have gained in popularity for fluid milk, use of plastic has shown some strength also. Over the past 5 years use of plastic containers increased from 3 percent of total sales to 11 percent.

Much to the joy of the dishwasher about nine-tenths of all milk now comes in throwaway containers.

Not only is the glass milk bottle becoming a thing of the past but there has been a shift in the size of the containers that milk comes in.

Once on practically every doorstep the quart container has stepped aside for the gallon and half gallon container. Quarts accounted for only 13 percent of total fluid milk sales in 1969.

More storage space found in today's refrigerator and a lower price per unit than in quarts may have some bearing on the trend toward larger containers.

On many wholesale routes, the bag-in-box container has made an antique of the milk can. Wholesalers' clients include retail stores, institutions, restaurants, and vendors.

The shift to sales through wholesale outlets, mainly food stores, was a major cause in the change to paper and plastic and to gallon and half-gallon containers. (22)

## At the Milk Mart You Can Settle for Less

Whole milk rarely goes on “special” in retail stores. Yet it's often possible to save on the weekly milk bill by shopping around.

A study of 39 milk markets shows

consumers paid widely ranging prices for milk within the same market area in 1969/70. From Maine to Illinois and as far south as Washington, D.C., study results confirmed there is no such thing as *the* price for whole milk.

Prices varied least in Burlington, Vt., where 4 different prices were charged. Greatest variation was found in Charleston, W. Va.—where retailers asked 26 different prices.

Such differences existed between prices charged at supermarkets, convenience stores, dairy stores, and small grocery stores. Often the price extremes turned up within single types of outlets.

Mostly, the variations in prices were not because of higher or lower butterfat content, grade, vitamin supplements, and other “pluses.” Generally, the differences had to do with type and size of container, and with the brand—whether the store's label or that of a processor.

Milk bought by the gallon or half gallon was usually more economical than by the quart. And, when comparing paper cartons with glass bottles, the latter type usually cost less. However, the amount of saving varied widely within the market areas. The saving on half-gallon purchases ranged from 1 to 20 cents, and on the gallon size, up to 17.

Looking at price differences among brands, store brands commonly were 2–4 cents per gallon cheaper than processor brands, although in one instance the difference was as much as 12 cents. In States with resale price controls, the price for both types was the same for the most part.

Supermarkets generally had lower prices than convenience stores. However, in a few of the 39 markets, convenience stores undersold or at least matched the price of the supermarkets.

Even more varied than store prices were home delivery prices. The reason is the majority of the clientele aren't aware of the prices they pay, much less the prices available from competing dealers. (21)



# THAILAND



*No longer a one-crop economy pinned to rice only, Thailand's agriculture has made striking headway in diversification since 1950. Development plans, if successful, will hasten the trend.*

As sure as there is a southwest monsoon to deliver water to Thailand's rice paddies, the Thai farmers will go on producing the crop that still overshadows Thailand's agriculture. Rice is the main source of livelihood for half the nation's population of 35 million. It's produced by 90 percent of Thailand's farms, and is the leading export item.

Thailand's agriculture, however, has been diversifying.

No longer a one-crop economy depending almost exclusively on rice, the country is now also a large producer and exporter of rubber, corn, kenaf, tapioca products, and castor seed. These new export crops moved to the forefront as recently as the mid-1950's, with the exception of rubber which began large-scale production in the late forties.

Rice now contributes about one-fifth to the more than \$700-million export earnings, compared with about one-half of the total 2 decades ago. But the decrease in the relative importance of rice is due not only to the expansion of other agricultural exports but also to increases in foreign sales of tin.

The growth of Thailand's agriculture in recent years has been impressive—about 5 percent annually in the 1960's. On a per capita basis, Thailand's percentage increase in farm production is among the highest in the developing world and higher than in a number of developed nations.

The success in expanding and diversifying production has been decisive in the development of the overall economy. Agriculture was one of the hard rocks on which other sectors built their rapid development—primarily on export earnings from farm products.

Other catalysts that propelled eco-



conomic expansion—growth in tin exports, foreign investments, tourism, and the injection of relatively large sums of U.S. dollars in connection with U.S. operations in Vietnam.

The Thai people are better fed than the people of most underdeveloped countries. Hunger rarely stalks in Thailand. Even in years of poor crops, the country still has large quantities of rice left over for export.

For more than a century its farmers have sold a portion of their rice crop commercially. Rubber and kenaf are produced solely for market. Of corn and cassava, only small amounts are retained by farmers for their own use. Other sources of cash income are hogs and ducks. Water buffaloes and cattle are kept mainly for draft purposes, though farmers in the Northeast raise buffaloes and cattle for sale to the Bangkok area.

But agriculture has been closely linked with the export trade. The export outlook for most of the Thai crops is uncertain, for the competition in world markets is the governing factor.

Right now, export prospects for rice in particular appear cloudy. World prices have gone downhill, partly because of the successful drive toward self-sufficiency in many of the formerly deficit countries.

To stimulate foreign sales of rice, last April the government abolished a heavy tax on exports of most types of rice. The elimination of the tax may also result in higher farm prices and may help bridge the gap between farm and nonfarm incomes.

One of the problems that cause concern in Thailand is that land for new cultivation is becoming scarce and farms are getting smaller. Technological improvements to boost productivity are deemed essential if agriculture is to continue to grow at the pace of recent years.

The official program for agricultural development seeks, among other things, more and better irrigation of farmland during both the wet and the dry season.

Thailand lies in direct path of the



southwest monsoon which dumps its rain on the fertile Central Plain—Thailand's rice bowl and one of Asia's most richly endowed agricultural regions.

Between May and September the Chao Phraya River floods the Central Plain creating conditions that are highly favorable for rice cultivation. But by November, the dry season sets in. Farmland that in July was too wet to support anything but rice becomes so parched that few other crops can survive.

Crops could be grown 'round the year in Thailand's tropical climate, if only the water were available.

In 1962, the Ditches and Dams Project began to control water delivery to individual farmers. By the end of 1967, 676,000 hectares (1 hectare = about 2.5 acres) were served by dikes and ditches. Work was progressing to extend irrigation to an additional 372,000 hectares.

Other water development projects have been completed, and more are being planned. The Second Development Plan (1967-71) allocates about three-fifths of the expenditures for agriculture to development of water resources. According to the Plan, 2.4 million hectares are to be in irrigation projects by the end of 1971.

The government has launched several related programs, including teaching farmers proper irrigation methods and providing credit for inputs for irrigation. Within the area

of the irrigation projects, water is offered free of charge to farmers.

The Thai government also aims to bring the poorer regions up to the level of the relatively prosperous Central Zone. It is considered a difficult task that will doubtless take many years to accomplish.

As for the future, here's how ERS economists view Thailand's agricultural potential:

Rice is expected to remain the chief crop, but the growth rate for other crops is projected higher than that for rice. The outlook for corn is for continued growth of production and exports. Oilseeds, sorghum, cassava, bananas, and various fruits have a good long term potential, but the short term outlook is for only moderate expansion. Soybeans and possibly sorghum may become important new exports.

The outlook for Thai rubber (Thailand is 4th largest rubber exporter) and kenaf is uncertain due to an unfavorable export situation.

For cotton, long term output prospects are good, in spite of current setbacks. Heavy imports will continue to be needed for the next several years. Local production of high quality tobacco will likewise fall short of domestic requirements.

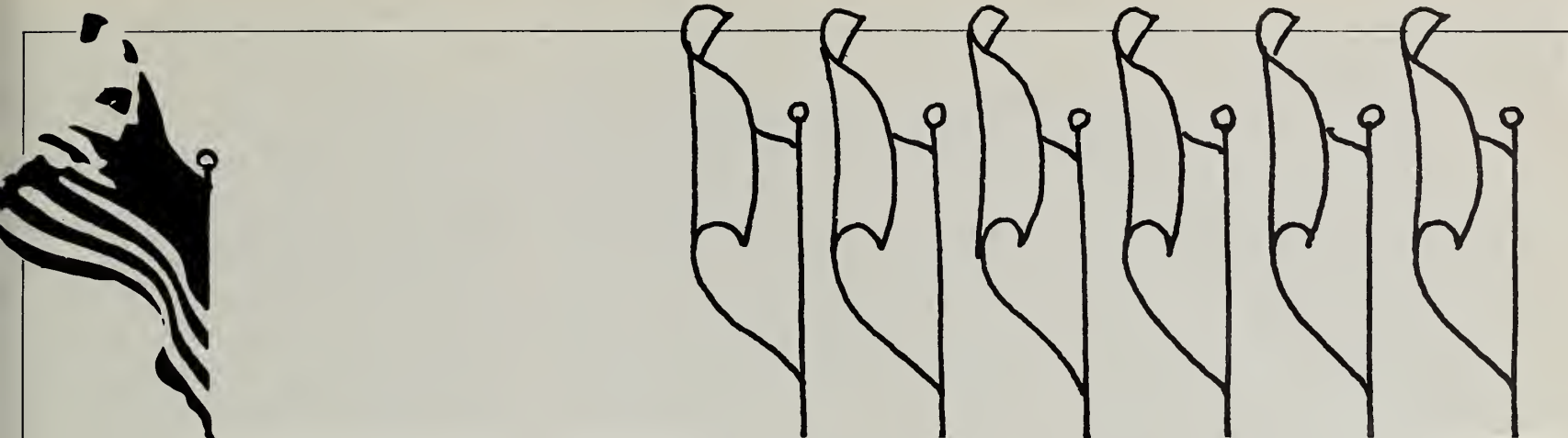
Wheat needs in the foreseeable future will be met through imports as they have been in the past.

Livestock and poultry offer promising opportunities for development because of rising consumer incomes. However, expansion of this sector demands better planning and modification of meat marketing arrangements.

Production of beef for export is still years away, as is self-sufficiency in dairy products.

As all this pertains to U.S. suppliers, they can expect generally favorable sales opportunities in Thailand. U.S. exports to this market during 1968-70 averaged \$34 million a year. Principal exports were unmanufactured tobacco, cotton, liquid beverage bases, flavoring extracts and sirups, grains and preparations, and dairy products. (23)





### A COMPARISON: AGRICULTURE IN THE U.S. AND EC

	United States	1970	European Community
<b>PEOPLE /</b> Agriculture employs more than 13 percent of the labor force in the EC, compared with 4.5 percent in the United States. The United States, with about 14 million or 7 percent more people than the EC, also had a higher rate of population growth between 1958 and 1969. Per capita GNP in the EC is less than half the U.S. figure.	917	Land area	Million hectares <sup>1</sup>
	203	Population	Millions
	78.6	Average annual employment	Millions
	3.5	Average annual employment in agriculture	Millions
	4.5	Agriculture's share of work force	Percent
	1.1	Workers per farm	Number
	2.9	Agriculture's share of gross domestic product	Percent
<b>FARMS /</b> Agricultural area is decreasing slowly in both the United States and the EC. But the proportion of land classified as arable, grassland, pasture, orchards and vineyards has remained roughly constant. Farmworker productivity in both United States and EC doubled in 1959-1969.	2.9	Numbers of farms	Millions
	155	Average Size of farms	Hectares
	40	Crop area per farm	Hectares
	140	Area per worker	Hectares
	35	Crop area per worker	Hectares
	18,000	Value of output per farm	Dollars
	2,450	Value of exports per farm	Dollars
	3,300	Food supply per capita	Calories/day
<b>OUTPUT /</b> Agricultural production in both the EC and United States has increased since 1955, but the gain was much larger in the Community. The process of unifying the EC's agricultural economies—which resulted in higher producer prices and in greater protectionism — encouraged higher production of grain and animal products. Within the EC, the Netherlands experienced the greatest rate of increase in agricultural production since 1955—about 57 percent. (24)	104.4	Corn	Million metric tons
	37.5	Wheat	"
	8.9	Barley	"
	1.0	Rye	"
	13.2	Oat	"
	3.8	Rice, paddy	"
	1.0	Pulses	"
	14.7	Potatoes	"
	35.6	Oilseeds	"
	19.9	Fruits and Nuts	"
	0.9	Tobacco	"
	35.8	Red meat	"
	4.8	Poultry	"
	53.3	Milk	"
	4.1	Eggs	"

<sup>1</sup> One hectare equals 2.5 acres.



## Kenya Sees New Future In Old Pyrethrum

Ever since the Chinese found a use for it 2 millennia ago, the plant pyrethrum has been harvested for its flowers and bug-killing powers.

Essence of pyrethrum is deadly to insects. But to man and his environment, it's probably one of the least hazardous insecticides currently in use. Pyrethrum's residues are chemically unstable; they rapidly break down in soil and water into relatively harmless compounds.

With the rising concern over dangers of using the other "hard" pesticides, world trade in pyrethrum has livened up. Exports of pyrethrum extract nearly doubled in the 1960-70 period. Half the world supply of pyrethrum comes from Kenya.

A substantial new demand has developed for that country's pyrethrum.

As a result, orders amounted to over 12,000 tons in the 1970 crop year, and further increases are expected during the next 2 or 3 years. In response to the revitalized demand for pyrethrum extract, the dried pyrethrum flower price has increased 13 percent.

This booming trade, however, may be nipped in the bud by a synthetic product recently developed by a British firm. The new insecticide is reportedly not only as safe as pyrethrum, but is also more toxic to insects. More important, it can be produced at a third of pyrethrum's cost.

The Kenya Government has responded to the competition by changing its subsidy policy so as to encourage production of higher-yielding flowers. Formerly, Kenya's 40,000 pyrethrum farmers got a flat rate subsidy for flowers. Now the government pays bonuses based on

actual yield of pyrethrins produced from the flower's extract. Also, Kenya's researchers have developed new high-yielding varieties. The government is working to get the seeds distributed to growers.

The U.S. is Kenya's biggest customer, with imports of nearly \$2 million in 1970. All was in the form of pyrethrum extract rather than flowers. (The more concentrated extract is easier to transport and is sold on the basis of tested pyrethrin content.)

Most of the pyrethrum used in the United States goes for household insecticide products. Only about 5 percent is used by farmers, mainly on livestock and on crops for canning or freezing. (25)

## EC Grain Shortage Elevates U.S. Sales

After a 3-year decline, U.S. agricultural exports to the European Community rebounded strongly in 1970. The final tally—over \$1½ billion—nearly equaled the record set in '66.

A grain shortage in the Community helped trigger the increases. Also, the continued growth of the EC's livestock industry stimulated demand for protein concentrates and other feedstuffs.

Feed grain exports jumped \$100 million over 1969 levels, accounting for nearly all the growth in variable-levy commodities—those subject to higher levies to protect EC producers from foreign competition.

Wheat exports also rose sharply, reversing a downtrend begun in 1967. Other variable-levy commodities—including poultry, beef, and lard—showed little change from the previous year.

Exports of nonvariable-levy commodities reached an all-time high of \$1.1 billion. Most of the gain was in soybeans and soybean products, for use in feeds. Cotton exports fell for the third straight year, but shipments of variety meats, tallow, nuts, and vegetables showed considerable expansion during last year. (26)





## Land in So. Vietnam Reverts to the Tiller

Once again, as his ancestors did, the South Vietnamese farmer has the opportunity to more fully control the land he tills and reap returns from his labor under a new land-to-the-tiller law signed by President Thieu in March 1970.

For centuries it was the custom that communal lands were administered by the village elders. They periodically distributed equal portions of land to all male members of the villages so that every family would have a share. In addition to commercial land there was family land

passed down from generation to generation.

When the French assumed political control of Vietnam in the 19th century, they gave out large tracts of hundreds, even thousands, of acres to individual farmers.

Following partition of Vietnam in 1955, less than 2 percent of the population owned nearly half the farmland in South Vietnam. Nearly three-quarters of the peasant families were tenants.

Under the new land redistribution law, the landlord—with certain exceptions—is allowed to retain about 47 acres for his personal use if he cultivated the land himself, plus 12.3

acres to be cultivated for ancestor worship. Land in excess of the limits will be distributed at no charge to tenant farmers and others with a 7½-acre limit per family.

The present tenant-tillers have first claim on redistributed plots, totaling an estimated 2.5 million acres. Next in line are parents of war dead, soldiers, and civil servants who gave up farming because of the war.

By the end of the 3-year distribution period, about 600,000 of the 1.2 million families who rent are expected to receive land under the law's provisions. As of early 1971 383,000 acres had been approved for distribution. (27)

---

**Addresses of State experiment stations:** This ready reference list for readers wishing to order publications and source material published through State experiment stations will be updated again in December.

---

STATE	CITY	ZIP CODE	STATE	CITY	ZIP CODE
ALABAMA	Auburn	36830	MISSISSIPPI	State College	39762
ALASKA	College, U. of Alaska	99701	MISSOURI	Columbia	65201
ARIZONA	Tucson	85721	MONTANA	Bozeman	59715
ARKANSAS	Fayetteville	72701	NEBRASKA	Lincoln	68503
CALIFORNIA	Berkeley	94720	NEVADA	Reno	89507
	(101 Giannini Hall)		NEW HAMPSHIRE	Durham	03824
	(145 Mulford Hall)		NEW JERSEY	New Brunswick	08903
	Davis	95616	NEW MEXICO	Las Cruces	88001
	(217 Mrak Hall)			NM State University	
	(1018 Haring Hall)			(P.O. Box 3-AG)	
	Los Angeles	90024	NEW YORK	Ithaca	14850
	Parlier	93648		(Cornell Station)	
	Riverside	92502		Geneva	14456
	(Citrus Research Center)			(State Station)	
COLORADO	Fort Collins	80521	NORTH CAROLINA	Raleigh	27607
CONNECTICUT	New Haven	06504		(Box 5847)	
	(P.O. Box 1106)		NORTH DAKOTA	Fargo	58102
	Storrs	06268		(State University Station)	
DELAWARE	Newark	19711	OHIO	Columbus	43210
FLORIDA	Gainesville	32601		(Ohio State University)	
GEORGIA	Athens	30601		Wooster	44691
	Experiment	30212	OKLAHOMA	Stillwater	74074
	Tifton	31794	OREGON	Corvallis	97331
HAWAII	Honolulu	96822	PENNSYLVANIA	University Park	16802
IDAHO	Moscow	83843		(106 Armsby Building)	
ILLINOIS	Urbana	61801	PUERTO RICO	Rio Piedras	00928
INDIANA	Lafayette	47907	RHODE ISLAND	Kingston	02881
IOWA	Ames	50010	SOUTH CAROLINA	Clemson	29631
KANSAS	Manhattan	66502	SOUTH DAKOTA	Brookings	57006
KENTUCKY	Lexington	40506	TENNESSEE	Knoxville	37916
LOUISIANA	Baton Rouge	70803	TEXAS	College Station	77843
	(Drawer E		UTAH	Logan	84321
	University Station)		VERMONT	Burlington	05401
MAINE	Orono	04473	VIRGINIA	Blacksburg	24061
	(106 Winslow Hall)		WASHINGTON	Pullman	99163
MARYLAND	College Park	20742	WEST VIRGINIA	Morgantown	26506
MASSACHUSETTS	Amherst	01002	WISCONSIN	Madison	53706
MICHIGAN	East Lansing	48823	WYOMING	Laramie	82070
MINNESOTA	St. Paul	55101		(University Station Box 3354)	
	(St. Paul Campus)				



## RECENT PUBLICATIONS

The publications listed here are issued by the Economic Research Service and cooperatively by the State universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D.C. 20250. State publications (descriptions below include name of experiment station or university after title) may be obtained only by writing to the issuing agencies of the respective States.

**OVER-THE-ROAD COSTS OF HAULING BULK MILK.** Herbert H. Moede, Marketing Economics Division. MRR 919.

Significant changes in milk haul-

ing and management practices have occurred in the past 4 years. A step-by-step procedure is provided to assist managers and other interested persons in comparing their hauling costs with the averages in this report. Assumptions and cost allocations can be varied to meet the needs of the individual operation. (See January 1971 Farm Index.)

**THE AGRICULTURAL SITUATION IN THE FAR EAST AND OCEANIA: REVIEW OF 1970 AND OUTLOOK FOR 1971.** Far East Branch, Foreign Regional Analysis Division. ERS For. 315.

This annual publication provides an analytical basis for shortrun policy decisions about current agricultural developments in those areas of the world. The publication is one of the five regional supplements to *The World Agricultural Situation*,

WAS 1, November 1970. Statistical information relating to production and trade of agricultural products in the region appears in a separate publication, *The 1970 Agricultural Data Book for the Far East and Oceania*, ERS For. 267.

**THE AGRICULTURAL ECONOMY OF SOMALIA.** Charles Treakle, Foreign Regional Analysis Division. ERS For. 310.

Somalia is nearly self-sufficient in good crop years but frequent recurring droughts cause food imports to average a quarter or more of the country's total imports. Principal food imports are cereals, cereal preparations, fruits and vegetables, and sugar. Somalia's chief exports to the U.S. are hides and skins. With external assistance, development projects have been aimed at agriculture through crop diversification.

## Article Sources

State publications indicated by (\*) may be obtained only from the experiment station or university cited. Manuscripts and special material are usually available only on request to authors.

1. Charles W. Porter, ESAD. "Recent Vegetable Supply Trends and Developments," *Vegetable Situation*, TVS-180; also, special material.
2. Rex F. Daly, John A. Dempsey, Jr., and Charles W. Cobb, ESAD. *Farm Numbers and Sizes in the Future* (manuscript).
3. Ronald D. Lacewell and William F. Hughes, Texas A&M University, in cooperation with FPED. *A Comparison of Capital Requirements And Labor Use, Alternative Sprinkler Irrigation Systems, Texas High Plains*, Texas Agr. Expt. Sta. Dept. Info. Report 71-3\*
4. *Poultry and Egg Situation*, PES-266; also, Agricultural Research Service (special material).
5. Velmar W. Davis, ERS. "Economics of Fertilizer Use by United States Farmers—Its Productivity and Potential Environment Degradation" (speech to International Symposium, Munich, West Germany, May 1971). Also John H. Berry, FPED. *Analysis of the Illinois Plant Nutrient Situation: 1964-69 Use, Recommendations, and Implications*, Department of Agricultural Economics, Agr. Expt. Sta., University of Illinois at Urbana-Champaign, December 1970. *Fertilizer Situation*, FS-1, March 1971.
6. David Brewster, ESAD (special material).
7. Paul E. Nelson, Jr., MED. *Price Differentials for Complete Feeds, Supplements, and Shelled Corn: A Regression Analysis*, AER 198.
8. Dwaine E. Umberger, FPED, and Norman K. Whittlesey and M. E. Wirth, Washington State Univ. *Machinery Investment Practices of Washington Farmers* (manuscript).
9. Calvin L. Beale, EDD (speech at meeting of American Agricultural Association, Detroit, Mich., Dec. 29, 1970).
10. Forest G. Warren and Nan P. Mitchem, FPED. *Farm Mortgage Lending*, FML 26.
11. U.S. Forest Service (special material).
12. Calvin L. Beale, EDD (special material).
13. EDD in cooperation with Michigan State University. *Rural Poor Who Could Benefit From Job Retraining in the East North Central States*, AER 204.
14. Allen Baker, MED (special material).
15. William T. Manley, MED. "Emerging Product Inroads Into Agriculture: Synthetics and Substitutes" (speech at 1971 National Agricultural Outlook Conference, Wash., D.C., February 1971).
16. Jeannette Findlay, MED. "Revised Price Indexes of Intermediate Goods and Services Bought by Food and Marketing Firms," *Marketing and Transportation Situation*, MTS May 1971.
17. *National Food Situation*, NFS 136, May 1971.
18. *The Wheat Situation*, WS-216, May 1971.
19. Charles W. Porter, ESAD. "Recent Vegetable Supply Trends and Developments," *Vegetable Situation*, TVS-180, May 1971; also, special material.
20. Robert R. Miller, ESAD (special material).
21. Alden C. Manchester, MED. *Pricing Milk and Dairy Products . . . Principles, Practices, and Problems* (manuscript).
22. *Dairy Situation*, DS 335, May 1971.
23. Omero Sabatini, FRAD. *The Agricultural Economy of Thailand* (manuscript).
24. William P. Roenick, FRAD. *Agriculture in the European Community and the United States 1958-68*, ERS For. 307.
25. Carey Singleton, FRAD, and Rex Dull, Foreign Agricultural Service (special material).
26. *Foreign Agricultural Trade of the United States*, March 1971.
27. Clarence E. Pike, FRAD. *The Agricultural Situation in the Far East and Oceania: Review of 1970 and Outlook for 1971*, ERS For. 315.

NOTE: Unless otherwise indicated, authors are on the staff of the Economic Research Service (ERS) with their divisions designated as follows: Economic and Statistical Analysis Division (ESAD); Economic Development Division (EDD); Farm Production Economic Division (FPED); Foreign Development and Trade Division (FDTD); Foreign Regional Analysis Division (FRAD); Marketing Economic Division (MED); and Natural Resource Economics Division (NRED).



# Economic Trends

ITEM	UNIT OR BASE PERIOD	1967	1970 YEAR	Apr.	Feb.	1971 Mar.	Apr.
<b>Prices:</b>							
Prices received by farmers	1967 = 100	—	110	111	112	111	111
Crops	1967 = 100	—	100	97	105	107	108
Livestock and products	1967 = 100	—	118	121	117	114	114
Prices paid, interest, taxes and wage rates	1967 = 100	—	114	114	118	118	119
Family living items	1967 = 100	—	114	113	117	117	117
Production items	1967 = 100	—	110	109	113	114	115
Ratio <sup>1</sup>	1967 = 100	—	96	97	95	94	93
Wholesale prices, all commodities	1967 = 100	—	110.4	109.9	112.8	113.0	113.3
Industrial commodities	1967 = 100	—	110.0	109.3	112.5	112.8	113.3
Farm products	1967 = 100	—	111.0	111.6	113.9	113.0	113.0
Processed foods and feeds	1967 = 100	—	112.0	111.8	113.3	113.7	113.5
Consumer price index, all items	1967 = 100	—	116.3	115.2	119.4	119.8	120.2
Food	1967 = 100	—	114.9	114.6	115.9	117.0	117.8
<b>Farm Food Market Basket: <sup>2</sup></b>							
Retail cost	Dollars	1,080	1,225	1,226	1,215	1,228	1,238
Farm value	Dollars	414	480	487	473	476	475
Farm-retail spread	Dollars	666	745	739	742	752	763
Farmers' share of retail cost	Percent	38	39	40	39	39	38
<b>Farm Income: <sup>3</sup></b>							
Volume of farm marketings	1967	100	103	80	83	84	77
Cash receipts from farm marketings	Million dollars	42,693	48,678	3,448	3,398	3,519	3,300
Crops	Million dollars	18,434	19,589	928	1,097	1,049	900
Livestock and products	Million dollars	24,259	29,089	2,520	2,301	2,470	2,400
Realized gross income <sup>4</sup>	Billion dollars	49.0	56.2	—	—	56.1	—
Farm production expenses <sup>4</sup>	Billion dollars	34.8	40.4	—	—	41.5	—
Realized net income <sup>4</sup>	Billion dollars	14.2	15.8	—	—	14.6	—
<b>Agricultural Trade:</b>							
Agricultural exports	Million dollars	—	7,174	559	636	716	634
Agricultural imports	Million dollars	—	5,667	515	420	500	554
<b>Land Values:</b>							
Average value per acre	1967 = 100	—	<sup>6</sup> 118	<sup>7</sup> 117	—	—	<sup>8</sup> 121
Total value of farm real estate	Billion dollars	—	<sup>6</sup> 207.3	<sup>7</sup> 208.2	—	—	<sup>8</sup> 214.0
<b>Gross National Product: <sup>4</sup></b>							
Consumption	Billion dollars	793.9	976.5	—	—	1,020.7	—
Investment	Billion dollars	492.1	616.7	—	—	646.4	—
Government expenditures	Billion dollars	116.6	135.7	—	—	142.4	—
Net exports	Billion dollars	180.1	220.5	—	—	228.7	—
	Billion dollars	5.2	3.6	—	—	3.3	—
<b>Income and Spending: <sup>5</sup></b>							
Personal income, annual rate	Billion dollars	629.3	801.0	806.0	830.4	836.8	841.3
Total retail sales, monthly rate	Million dollars	26,151	30,381	30,536	31,611	32,183	—
Retail sales of food group, monthly rate	Million dollars	5,759	6,787	—	6,940	7,004	—
<b>Employment and Wages: <sup>5</sup></b>							
Total civilian employment	Millions	74.4	78.6	78.5	78.5	78.5	78.7
Agricultural	Millions	3.8	3.5	3.6	3.3	3.4	3.6
Rate of unemployment	Percent	3.8	4.9	4.7	5.8	6.0	6.1
Workweek in manufacturing	Hours	40.6	39.8	40.0	39.5	39.9	39.8
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	3.36	3.32	3.51	3.52	3.54
<b>Industrial Production: <sup>5</sup></b>							
	1967 = 100	—	106	108	104	105	105
<b>Manufacturers' Shipments and Inventories: <sup>5</sup></b>							
Total shipments, monthly rate	Million dollars	45,712	55,554	54,539	57,803	58,317	—
Total inventories, book value end of month	Million dollars	82,825	99,614	97,791	99,520	99,210	—
Total new orders, monthly rate	Million dollars	45,928	55,009	53,374	58,288	57,892	—

<sup>1</sup> Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. <sup>2</sup> Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1959-61—estimated monthly. <sup>3</sup> Annual and quarterly data are on 50-State basis. <sup>4</sup> Annual rates seasonally adjusted first-quarter. <sup>5</sup> Seasonally adjusted. <sup>6</sup> As of November 1, 1970. <sup>7</sup> As of March 1, 1970. <sup>8</sup> As of March 1, 1971.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

UNITED STATES GOVERNMENT PRINTING OFFICE  
DIVISION OF PUBLIC DOCUMENTS, WASHINGTON, D.C. 20402

OFFICIAL BUSINESS



PENALTY FOR PRIVATE USE TO AVOID  
PAYMENT OF POSTAGE, \$300  
(GPO)

To stop mailing ☐ or to change your  
address ☐ send this sheet with new  
address to The Farm Index, OMS, U.S.  
Department of Agriculture, Rm. 1459,  
Washington, D.C. 20250.

3007 MORTCNLIBA412 18038 0001  
C MORTON LIBRARY USDA  
WASHINGTON DC 20012

The Farm Index

☆ U. S. GOVERNMENT PRINTING OFFICE: 1970 394-331/9